

Amendments to the Claims:

No amendments have been made to the claims. This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) In a computer system having a graphical user interface implementing a windowing environment, a method for displaying two or more overlapping windows on a computer display, the method comprising:

displaying any non-overlapping portions of the windows on the display;

blending any overlapping portions of the windows; and

displaying the blended overlapping portions of the windows on the display.

2. (Original) The method as recited in claim 1, wherein the windows are hardware sprites and the blending step includes compositing the window sprites according to an order.

3. (Original) The method as recited in claim 2, wherein the order is a display order.

4. (Original) The method as recited in claim 3, wherein the display order is a z order.

5. (Original) The method as recited in claim 2 wherein the blending step includes specifying an opaqueness value for each window sprite.

6. (Original) The method as recited in claim 5, wherein the opaqueness value is specified in the form of an integer having values between approximately 0 and 255.

7. (Original) The method as recited in claim 1, wherein a first of the windows has a first display order and a second of the windows has a second display order, and wherein the second display order is greater than the first display order.

8. (Original) The method as recited in claim 7, wherein the blending step includes:

redirecting any overlapping portions of the first window to at least one underlay buffer; and

compositing the one or more underlay buffers with the second window.

9. (Original) The method as recited in claim 8, wherein the display order is a z order.

10. (Original) The method as recited in claim 7, wherein the blending step includes specifying an opaqueness value for each window.

11. (Original) The method as recited in claim 10, wherein the opaqueness value is an integer having values between approximately 0 and 255.

12. (Original) The method as recited in claim 1, wherein at least one of the windows is substantially rectangular in shape.

13. (Original) The method as recited in claim 12, wherein at least one of the windows is substantially non-rectangular in shape.

14. (Original) A computer-readable medium having computer-executable instructions for performing the steps recited in claim 1.

15. (Original) A computer system having a memory, an operating system and a central processor, the computer system being operable to execute the steps recited in claim 1.

16. (Original) A method in a computer system for displaying two or more overlapping bitmaps on a computer display, the method comprising:

redirecting any overlapping portions of a first of the two or more bitmaps to one or more underlay buffers; and

compositing a second of the two or more bitmaps with the overlapping portions of the first object bitmap; and

displaying the composited second bitmap and any nonoverlapping portions of the first bitmap.

17. (Original) The method as recited in claim 16, wherein the first and second bitmaps include a display order and the second bitmap includes an opacity level.

18. (Original) The method as recited in claim 17, wherein the second bitmap has a higher display order than the first bitmap.

19.(Original) The method as recited in claim 18, wherein the display order is a z order.

20. (Original) The method as recited in claim 16, further comprising:
receiving a function call creating the second bitmap; and
receiving a function call setting the opacity level of the second
bitmap.

21.(Original) The method as recited in claim 16, wherein the redirecting step includes:
clipping an overlapping portion of the first bitmap; and
sending the overlapping portion of the first bitmap into the one or more underlay buffers.

22.(Original) The method as recited in claim 16, wherein the compositing step includes alpha-blending the second bitmap with the redirected portion of the first bitmap according to an order.

23.(Original) The method as recited in claim 22, wherein the order is a display order.

24.(Original) The method as recited in claim 23, wherein the display order is a z order.

25.(Original) The method as recited in claim 16 further comprising:
displaying at least a portion of the first and second bitmaps as hardware sprites; and
compositing the second bitmap sprite with any overlapping portions of the first bitmap sprite.

26.(Original) A computer-readable medium having computer-executable instructions for performing the steps recited in claim 16.

27.(Original) A computer system having a memory, an operating system and a central processor, the computer system being operable to execute the steps recited in claim 16.

28. (Original) A layering engine in a computer system for displaying a layered object and one or more underlying objects on a computer display, the layering engine comprising:

one or more underlay buffers containing data indicative of overlapping portions of the one or more underlying objects; and

a composition buffer for receiving the underlay buffer data and compositing the data according to a display order.

29.(Original) The layering engine as recited in claim 28, wherein the display order is a z order.

30.(Original) The layering engine as recited in claim 28, wherein the composition buffer alpha-blends the data in the one or more underlay buffers with the layered object.

31. (Original) The layering engine as recited in claim 28 further comprising a sprite buffer, wherein the objects are converted into sprites, and wherein the sprite buffer contains the object sprites and sends them to the compositing buffer for compositing.

32.(Original) The layering engine as recited in claim 31, wherein the composition buffer is adapted to alpha-blend the sprites.

33.(Original) A computer system having one or more applications generating objects to be displayed, the computer display system comprising:

a processor for executing the applications; and

a display device coupled with the processor for displaying the application objects;

wherein the display device displays the objects such that a first portion of any overlapping objects is blended and displayed as one or more sprites and a second portion of any overlapping objects is redirected to an underlay buffer and blended and displayed; and

wherein the display device displays the objects such that any non-overlapping portions of the objects are displayed in a non-blended manner.

34.(Original) A computer-readable medium having stored thereon a data structure, the data structure comprising at least one field containing data indicative of a parameter designating an object as a layered object.

35.(Original) In a computer system having a graphical user interface including a display, a method of displaying graphical representations on the display, the method comprising:

displaying a first window on the display;

displaying a second window on the display such that at least some portion of the second window overlaps and underlays the first window;

blending the first and second windows such that the portion of the second window which overlaps the first window is at least partially visible to a user.

36.(Original) The method as recited in claim 35, wherein the first and second windows are displayed according to an order.

37.(Original) The method as recited in claim 36, wherein the order is a display order.

38.(Original) The method as recited in claim 37, wherein the display order is a z order.

39.(Original) The method as recited in claim 35, wherein the blending step includes attributing an opaqueness value to at least the first windows.

40.(Original) The method as recited in claim 39, wherein the opaqueness value is integer having values between approximately 0 and 255.

41.(Original) A computer-readable medium having computer-executable instructions for performing the steps recited in claim 35.

42.(Original) A computer system having a memory, an operating system and a central processor, the computer system being operable to carry out the steps recited in claim 35.

43.(Original) In a computer system having a graphical user interface including a display and a user interface selection device, a method of providing and selecting two or more objects on the display, the method comprising:

displaying a first of the two or more objects on the display;

displaying a second of the two or more objects on the display such that the second object overlaps and underlays the first object;

blending the first and second objects such that the portion of the second object which overlaps the first object is at least partially visible to a user;

receiving a user selection signal indicative of the user interface selection device pointing to the overlapping portion of the first and second objects; and

processing the user selection as indicative of a selection of the underlying portion of the second object.

44.(Original) The method as recited in claim 43, wherein the first and second objects are displayed according to an order and wherein the first object is attributed a higher order than the second object.

45.(Original) The method as recited in claim 44, wherein the order is a z order.

46.(Original) The method as recited in claim 43, wherein the blending step includes attributing an opaqueness value to at least the first object.

47.(Original) The method as recited in claim 46, wherein the opaqueness value is an integer having values between approximately 0 and 255.

48.(Original) A computer-readable medium having computer-executable instructions for performing the steps recited in claim 43.

49.(Original) A computer system having a memory, an operating system and a central processor, the computer system being operable to carry out the steps recited in claim 43.

50.(Original) In a computer system having a graphical user interface including a display and a user interface selection device, a method of animating window objects on the display, the method comprising:

obtaining a window object to be displayed on the display;

attributing the window object a variable translucency;

compositing the window object with any underlying objects; and

varying the translucency of the window object to create an animation of the window object.

51.(Original) The method as recited in claim 50, wherein the window object is representative of menu, the method further comprising the steps of :

retrieving a set of menu entries for the menu;

displaying the set of menu entries;

receiving a menu entry selection signal indicative of the user interface selection device pointing at one of the menu entries;

displaying a visual indication of the menu entry selection;

blending the visual indication of the menu entry selection and any underlying graphics such that the visual indication of the menu entry selection progressively fades until it is no longer visible.

52. (Original) The method as recited in claim 51, wherein the step of displaying the visual indication includes highlighting the menu entry selection with a solid color.

53. (Original) The method as recited in claim 51, wherein the blending step includes progressively displaying the highlighted menu entry selection in a faded manner.

54. (Original) The method as recited in claim 51, wherein the step of displaying the visual indication includes attributing an opaqueness value to the visual indication.

55. (Original) The method as recited in claim 54, wherein the opaqueness value is an integer having values between approximately 0 and 255.

56. (Original) The method as recited in claim 54, wherein the blending step includes reducing the opacity value attributed to the visual indication of the menu entry selection.

57. (Original) The method as recited in claim 50 further comprising the step of displaying a visual indication of the window object, wherein the varying step includes adjusting the translucency of the window object such that the visual indication of the window object progressively fades in until it is fully non-translucent.

58. (Original) A computer-readable medium having computer-executable instructions for performing the step recited in claim 50.

59. (Original) A computer system having a memory, an operating system and a central processor, the computer system operable to carry out the steps recited in claim 50.